

## **REMARKS**

Reconsideration of the present application is respectfully requested. Claims 1-28 were originally presented. Claim 24 was previously canceled, and claim 2 is canceled by this amendment, so that claims 1, 3-23, and 25-28 are currently pending. Claims 1, 13, and 19 are in independent form. Claims 1 and 25 are amended as provided herein.

In the Office Action mailed April 26, 2005, the Examiner rejected independent claim 19 as being indefinite under 35 U.S.C. § 112, second paragraph, stating that “[a] broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired.” (Office Action, p. 2, lines 3-6).

According to MPEP § 2173.05(c)(I), “[u]se of a narrow numerical range that falls within a broader range in the same claim may render the claim indefinite when the boundaries of the claim are not discernible.” Thus, two requirements must be met to render a claim indefinite: 1) there must be a narrow numerical range that falls within a broader range, and 2) the boundaries of the claim are not discernible. Applicant submits that the ranges recited in claim 1 do *not* include a narrow numerical range that falls within a broader range; rather, the ranges recited in claim 1 are independent of one another, rendering the boundaries of the claim discernible. Thus, neither requirement of MPEP § 2173.05(c)(I) has been met to defeat claim 19 as indefinite under 35 U.S.C. § 112, second paragraph.

Looking at the ranges recited in claim 19, the alleged “narrower” range recites a bone meal-to-palatability enhancer weight ratio in the range from about 1:10 to about 1:1; whereas the alleged “broader” range recites a supplement comprising at least about 5 weight percent bone meal and at least about 25 weight percent of palatability enhancer. Applicant submits that, in order for a narrow range to be considered as falling *within* a broad range, there could be no example of meeting the limitations of the narrow range without also meeting the limitations of the broader range. Accordingly, Applicant submits the following hypothetical examples demonstrating the absence of

a broader/narrower relationship of the ranges recited in claim 19.

If a product contained 5 percent by weight of bone meal and 5 percent by weight of palatability enhancer, then the alleged “narrower” range limitations are met because the resulting ratio is 1:1. However, the limitations of the alleged “broader” range are *not* met because the recited minimum palatability enhancer in claim 19 is 25 percent by weight.

Furthermore, a rejection of claim 19 would also be improper based on the converse of the current rejection. The recited range of bone meal-to-palatability enhancer weight ratio of 1:10 to 1:1 is not a broader range of the minimum 5 percent by weight of bone meal and minimum 25 percent by weight of palatability enhancer range. For example, if a product contained 75 percent by weight of bone meal and 25 percent by weight of palatability enhancer, this would meet the now “narrower” range limitations. However, this would yield a 3:1 weight ratio, which is *not* within the now “broader” range limitations. By looking at these examples, it is obvious that the ratios recited in claim 1 are not a narrower range of the minimum amounts recited in claim 1, and vice versa. Rather, they are independent of one another and thus not indefinite under 35 U.S.C. § 112, second paragraph.

Additionally, Applicant submits that the boundaries of claim 19 are discernible, thus defeating the second indefiniteness requirement of MPEP § 2173.05(c)(I). The Examiner states that the reason this type of claim cannot stand is because it raises “a question or doubt as to whether the feature introduced by such language [as the words “such as”] is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims.” (Office Action, p. 2, lines 9-12). However, it should be clear from the hypothetical examples above that both recitations contribute to defining the scope of the claim. Each range is independent from the other and both ranges’ limitations must be met in order to infringe. Furthermore, there is no language in claim 19 indicating a broad range followed by a narrower range. Therefore, Applicant submits that the Examiner’s rejection of claim 19 as indefinite under 35 U.S.C. § 112, second paragraph, is improper.

In the Office Action, the Examiner rejected claims 1-3 under 35 U.S.C. § 103(a) as being

unpatentable over U.S. Patent Nos. 76,272 (Tayntor), 3,704,204 (Heck), or 2,182,171 (Coyner). For the reasons given below, Applicant submits that independent claim 1 is patentable over Tayntor, Heck, and Coyner.

With respect to claim 1, Applicant has amended this claim to recite that the palatability enhancer in the supplement is "formed primarily of material derived from animals." Support for this amendment may be found, for example, in original claim 2.

In order to establish a *prima facie* case of obviousness, (1) the references must teach or suggest all the claim limitations, (2) there must be some suggestion or motivation to modify or combine the teachings, and (3) there must be a reasonable expectation of success. (MPEP § 2143).

Applicant submits that neither Tayntor, Heck, nor Coyner teach or suggest all the claim limitations of independent claim 1, and thus claim 1 is patentable over these prior art references. With respect to Tayntor, in the Office Action the Examiner suggests that caraway seed could be a palatability enhancer. Although Applicant does not believe caraway seed is "highly palatable to carnivorous animals," Applicant has amended claim 1 to recite that the palatability enhancer is "formed primarily of material derived from animals." This amendment clearly distinguishes claim 1 from Tayntor because, for example, caraway seed is certainly not primarily derived from animals. Thus, Applicant submits that Tayntor does not teach or suggest all the limitations of claim 1.

With respect to Heck, the Examiner states that the commonality of meat and bone meal is shown by the fact that people know to test it for bacteria. However, the fact still remains that Heck does not define or even suggest any ratio of bone meal-to-palatability enhancer and thus could not possibly disclose the ratios recited in claim 1. Thus, Applicant submits that Heck does not teach or suggest all the limitations of claim 1.

With respect to Coyner, Examiner makes no new arguments in the most recent Office Action. Thus, Applicant continues to maintain that Coyner fails to disclose the ratios recited in claim 1. Coyner does not make any mention of an ingredient that could be a palatability enhancer, and thus could not possibly disclose any ratio of bone meal-to-palatability enhancer.

Additionally, Applicant submits that the second requirement to establish a *prima facie* case of obviousness has similarly not been met. There is a stark absence of any suggestion or motivation in Tayntor, Heck, and Coyner for increasing the amount of bone meal in pet food products. In fact, prior art has taught away from increasing the amount of bone meal in pet food due to the increased spoilage rate and the increased risk of Bovine Spongiform Encephalopathy (Mad Cow disease).

Therefore, because neither Tayntor, Heck, nor Coyner teach or suggest all the limitations of Applicant's independent claim 1, and because Examiner has failed to point to a proper source of a suggestion or motivation to combine or modify these references, Applicant submits that Examiner has failed to establish a *prima facie* case of obviousness.

In an attempt to cure the above references' failure to disclose a bone meal-to-palatability enhancer ratio, the Examiner states in the Office Action that it would have been within the skill of the ordinary worker to determine particular amounts of ingredients; because, according to the Examiner, the discovery of an optimum value of a result-effective variable is ordinarily within the skill of the art. (Office Action, p. 6, lines 7-10). However, Applicant submits that the ingredients claimed are *not* result-effective variables. MPEP § 2144.05(II)(B) states that "[a] particular parameter must first be recognized as a result-effective variable, i.e., *a variable which achieves a recognized result*, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation." (emphasis added) (citing *In re Antonie*, 559 F.2d 618 (CCPA 1977)). In *In re Antonie*, treatment capacity of a wastewater treatment device was not recognized in the prior art to be a function of tank volume to contractor ratio, and thus the parameters of this ratio were not result-effective variables. Applicant submits that prior art has not recognized increased bone meal content in pet food to be a deterrent to unwanted grazing by carnivorous animals. Thus, the parameters of the ratio of bone meal-to-palatability enhancer are not result-effective variables. Therefore, the discovery of optimum values could not ordinarily be within the skill of the art, and thus not obvious under 35 U.S.C. § 103(a).

Additionally, MPEP § 2145 (X)(B) states that an applicant may argue an impermissible

“obvious to try” rationale in response to an obviousness rejection when there are a number of varying parameters and the prior art gives no indication of which parameters are critical or no direction as to which of many possible choices is likely to be successful. Applicant submits that neither Tayntor, Heck, nor Coyner give any indication whatsoever as to which of the many variables disclosed in each reference would be successful at deterring carnivorous animals from grazing. Therefore, rejection of independent claim 1 on an “obvious to try” rationale is improper.

For all of the foregoing reasons, Applicant submits that amended claim 1 is patentable over the prior art. Additionally, because any claim depending from a patentable independent claim is also patentable, dependent claims 3-12, which depend from independent claim 1, are also patentable.

In the Office Action, the Examiner rejected independent claims 13 and 19 under 35 U.S.C. § 103(a) as being unpatentable over Tayntor, Heck, or Coyner, and further in view of U.S. Patent Nos. 3,908,025 (Miller), 5,200,218 (Lasater), and 6,280,779 (Nadeau), and further in view of U.S. Patent No. 3,968,269 (Payne).

Applicant submits that the Examiner has failed to establish a *prima facie* case of obviousness for claims 13 and 19. In order to establish a *prima facie* case of obviousness, (1) the references must teach or suggest all the claim limitations, (2) there must be some suggestion or motivation to modify or combine the teachings, and (3) there must be a reasonable expectation of success. (MPEP § 2143).

Applicant submits that Tayntor, Heck, Coyner, Miller, Lasater, Nadeau, and Payne fail to teach or suggest all claim limitations of independent claims 13 and 19. For example, claim 13 recites a bone meal-to-palatability enhancer weight ratio in the range of from about 1:5 to 1:2. Tayntor states that an ounce of caraway is mixed with the cows’ food, and the dose of bone meal per cow is from one to two ounces. This yields a bone meal-to-palatability enhancer weight ratio of from 1:1 to 2:1. Thus, Applicant submits that Tayntor does not disclose the weight ratio ranges as recited in claim 13. Also, for example, Claim 19 recites a step of causing a carnivorous animal to ingest a supplement. Tayntor, however, only discloses a supplement being ingested by cows, which are

certainly not carnivorous. Thus, applicant submits that Tayntor does not teach or suggest all of the claim limitations of claims 13 and 19.

Claim 19 further recites a bone meal-to-palatability enhancer weight ratio of about 1:10 to about 1:1. Heck, Coyner, Miller, Lasater, Nadeau, and Payne do not disclose the bone meal-to-palatability enhancer weight ratios of claims 13 and 19.

Applicant submits that Heck fails to disclose any bone meal-to-palatability enhancer weight ratio, and thus could not disclose the weight ratios recited in claims 13 and 19. Also, Coyner fails to disclose any type of palatability enhancer and thus could not possibly disclose a weight ratio of bone meal-to-palatability enhancer. Thus, Applicant submits that neither Heck nor Coyner teach or suggest all of the claim limitations of claims 13 and 19.

With respect to Payne and Nadeau, the Examiner states that Payne discloses that bone meal is related to ash content and table VII in Nadeau discloses bone meal with meat. Examiner further points out that Nadeau discloses protein in amounts of about 50% and ash in amounts of about 8%. The Examiner goes on to say that the bone meal is the only ingredient which could have contributed any appreciable amount of ash as shown in Table VII of Nadeau, thus disclosing the claimed ratios.

Applicant submits that Nadeau does not disclose a discernable bone meal-to-meat ratio, even in view of Payne. While it is true that bone meal may contribute to the ash content in pet food, bone meal is far from being the sole source of ash. Ash is the inorganic portion of pet food and can originate from many other sources, such as vitamins and minerals. This is apparent looking at tables IV through VIII in Nadeau. Not every table shown has bone meal listed in their ingredients, yet each table has some ash content. However, all 5 tables have vitamins and minerals listed in their added ingredients. Thus, it is apparent that added vitamins and minerals (many of which are inorganic) contribute significantly to the ash content.

In an attempt to explain why some tables in Nadeau do not have bone meal listed in the ingredients but still have significant ash content, the Examiner states that the meat by-products listed in the ingredients could contain bones. Applicant respectfully points out that Nadeau defines meat

by-products as including "liver, spleen, heart, and lung." (Nadeau, col. 2, line 3). No mention is made of bones or bone meal. Further support for this contention comes from looking at table VI in Nadeau. The ingredients for that table list both meat by-products and steamed bone meal. If bone meal were contained in meat by-products, it would be unnecessary to list both as ingredients.

Further, the Examiner states that bone meal must be included in each table in Nadeau, even though not listed, because it is not seen how other ingredients could contribute calcium, phosphorous, magnesium, and other minerals. Applicant respectfully points out that each table contains "minerals" listed in the added ingredients and could very well be the source of the minerals such as calcium, phosphorous, and magnesium.

Thus, Applicant submits that it is not possible to discern how much of the ash content comes from bone meal and how much comes from other ingredients listed in tables IV through VIII in Nadeau. Therefore, since it is impossible to determine how much of the ash content is constituted by bone meal, it is not possible to discern a ratio of bone meal-to-meat. Thus, Nadeau and Payne, even when combined, do not disclose the weight ratios recited in claims 13 and 19.

With respect to Miller, the Examiner makes no new comments in the current Office Action. Thus, Applicant continues to maintain that Miller does not disclose a finite ratio of bone meal-to-palatability enhancer. In the current Office Action, as well as in the previous Office Action, the Examiner states that Miller discloses a composition containing bone meal and meat meal, where "meat (palatability enhancer) is used in amounts of 19-25T (sic) and meat by-products are used in amounts of 0-15%." (Office Action, page 3, lines 13-16). Although Applicant admits that the table in column 3 of Miller discloses a composition that contains bone meal and various palatability enhancers (e.g., liver, chicken, meat, and fish), nowhere in Miller is it taught or suggested that the bone meal-to-palatability enhancer weight ratio should be in the ranges recited in claims 13 and 19. In fact, the actual amount of bone meal employed in the Miller composition is wholly speculative because the table in column 3 does not give a specific value or range for the amount of bone meal. Rather, the table in column 3 of Miller simply states that "meat and bone meal" should be present

in amount of 10 to 25 percent, and since no ratio of meat meal-to-bone meal is provided in Miller, no specific amount of bone meal can be implied from Miller. Therefore, Miller could not possibly disclose Applicant's claimed bone meal-to-palatability enhancer weight ratios recited in claims 13 and 19.

With respect to Lasater, the Examiner makes no new comments in the current Office Action. Thus, Applicant continues to maintain that Lasater fails to disclose any palatability enhancer that is highly palatable to carnivorous animals, thereby preventing disclosure of a bone meal-to-palatability enhancer weight ratio as recited in claims 13 and 19.

Further, Applicant submits that even if the "flavorings" listed in the examples from column 5 and 6 in Lasater were to be considered as a palatability enhancer that is highly palatable to carnivorous animals, the range of bone meal-to-palatability enhancer weight ratios still does not disclose Applicant's ratios as recited in claims 13 and 19. Lasater states that "flavorings" are used at between 1 and 4 cc (cubic centimeters) per pound. Assuming the "flavorings" have a density close to water (1 g/cc), this translates into approximately 0.22 weight percent at the low end and 0.88 weight percent at the high end. Even if the flavorings were five times the density of water (which would be very dense indeed), the maximum weight percent of the palatability enhancer would still only reach 4.4. This does not disclose the ranges of claim 19, which recites a minimum palatability enhancer weight percent of 25. Converting these numbers from Lasater yields a range of bone meal-to-palatability enhancer weight ratios from approximately 59:1 to approximately 2.95:1. This range does not disclose Applicant's range in claim 13, which recites a bone meal-to-palatability enhancer weight ratio in the range of from about 1:5 to about 1:2, nor in claim 19, which recites a bone meal-to-palatability enhancer weight ratio in the range from about 1:10 to about 1:1.

Therefore, because Tayntor, Heck, Coyner, Miller, Lasater, Nadeau, and Payne do not teach or suggest all the limitations of independent claims 13 and 19, Applicant submits that the Examiner has failed to establish a proper *prima facie* case of obviousness. Further, the Examiner has failed to point to a proper source of a suggestion or motivation to modify or combine the teachings of



Application No. 10/600,321  
Amendment dated June 27, 2005  
Reply to Office Action of April 26, 2005

Tayntor, Heck, Coyner, Miller, Lasater, Nadeau, and Payne in a manner that would arrive at Applicant's invention of independent claims 13 and 19.

Accordingly, Applicant submits that independent claims 13 and 19 are patentable over the prior art of record. Additionally, because any claim depending from a patentable independent claim is also patentable, dependent claims 14-18, which depend from independent claim 13, and dependent claims 20-23 and 25-28, which depend from independent claim 19, are also patentable.


Applicant respectfully requests that a timely Notice of Allowance be issued in this case. Should the Examiner have any questions, please contact the undersigned at (800) 445-3460.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 19-0522.

Respectfully submitted,

HOVEY WILLIAMS LLP

By:

  
Kameron D. Kelly, Reg No. 44,181  
HOVEY WILLIAMS LLP  
2405 Grand Boulevard, Suite 400  
Kansas City, Missouri 64108  
(816) 474-9050

ATTORNEYS FOR APPLICANT